

The SONET/SDH multiplexing hierarchy is extended to very high rates by creating new virtual containers of a higher capacity, and their associate pointers. The multiplexing hierarchy nests the pointers into the payload, so that the number of pointers on the high capacity line is importantly reduced, as the high rate spans of the network do not see the STS-1/STM-1 pointer granularity. Fewer pointers result in reducing the current complexity of pointer processing. The complexity of the multiplexing hierarchy is also reduced by the use of larger containers. The hierarchy may be extended to higher rates, as needed, and may also be used for other technologies, besides SONET/SDH.